# NATIONAL BUREAU OF STANDARDS REPORT

| NBS PROJECT | | NBS REPORT |
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# MODIFICATION OF COCKPIT EXTENSION LAMP ASSEMBLY, TYPE B-7

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## 1. INTRODUCTION

This report describes the modification of a cockpit extension-lamp assembly type B-7, to provide more effective strain relief for the cable entering the unit. This modification is designed so that it may be fabricated easily at any naval field service center.

## 2. MATERIAL

One cockpit extension lamp assembly type B-7, built to Air Force Specification 94-32228-A, was received at the National Bureau of Standards on November 16, 1953.

The assembly consists of a hand-held extensible floodlight, attached by a cable to a spring loaded reel mounted in a fixed stowage unit. The stowage unit is designed to hold the floodlight when the floodlight is not in use. The cable in the unmodified floodlight unit is secured by a split-washer type clamp. This clamp prevents the cable from pulling loose, but does not prevent it from twisting at the base of the lamp socket. This twisting action evidently causes the insulation to fray near the terminals and has resulted in numerous reports of failures in service.

## 3. DESCRIPTION OF MODIFICATION

Figure 1 is a photograph and Figure 2 a detailed drawing of a cable clamp designed to use the fiber insulating strip between the two terminal posts for a securing point. This clamp is adapted from the cable clamp of a two-pin, series 300, in-line Jones electrical connector, (which may be used, if available) modified in the following manner:

(a) A notch 1/16" wide and 1/8" deep is filed in the center of the tip of each holding finger of the clamp. This notched section slides over the insulating strip of the assembly, and prevents any twisting movement of the clamp.

(b) The clamp is dimpled as shown in Figure 2 to insure a tighter grip on the cable.

To prevent possible shorting against the cable clamp, it is recommended that the stranded cable leads be soldered before assembly of the modified clamp.

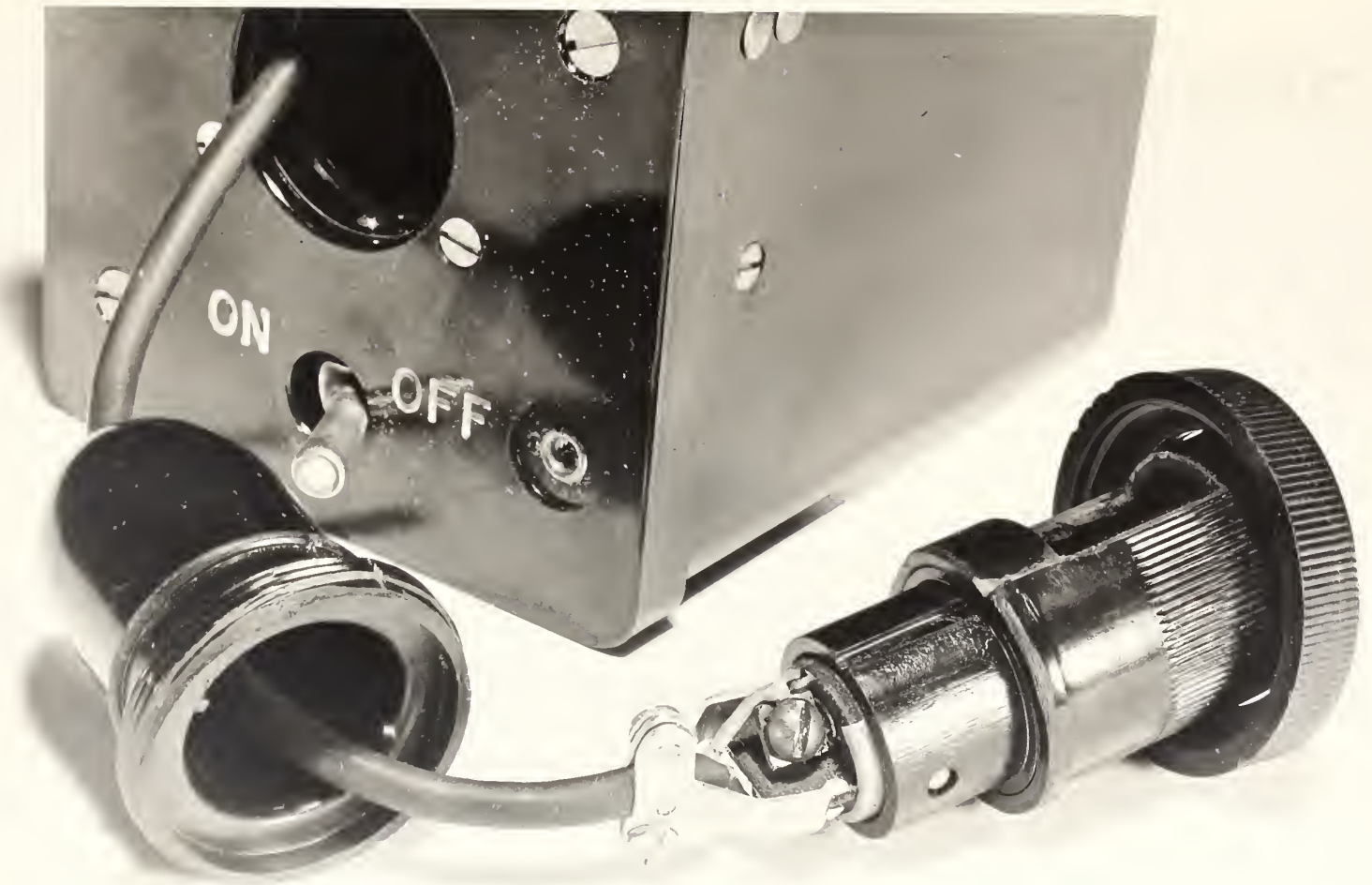
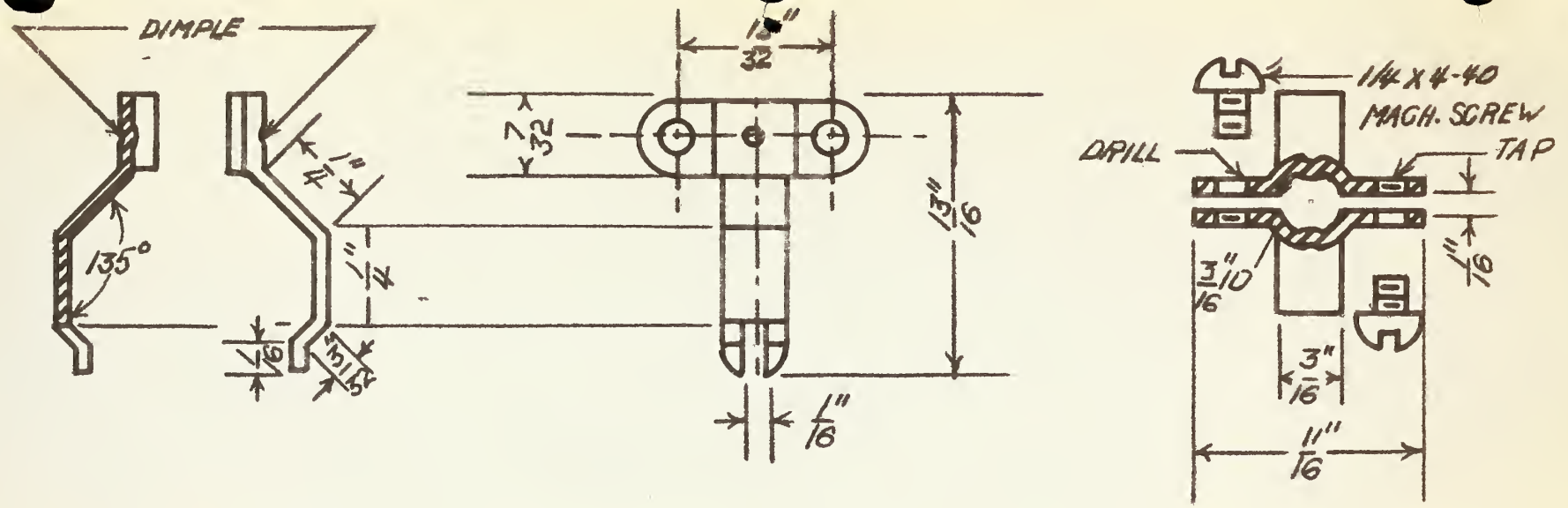
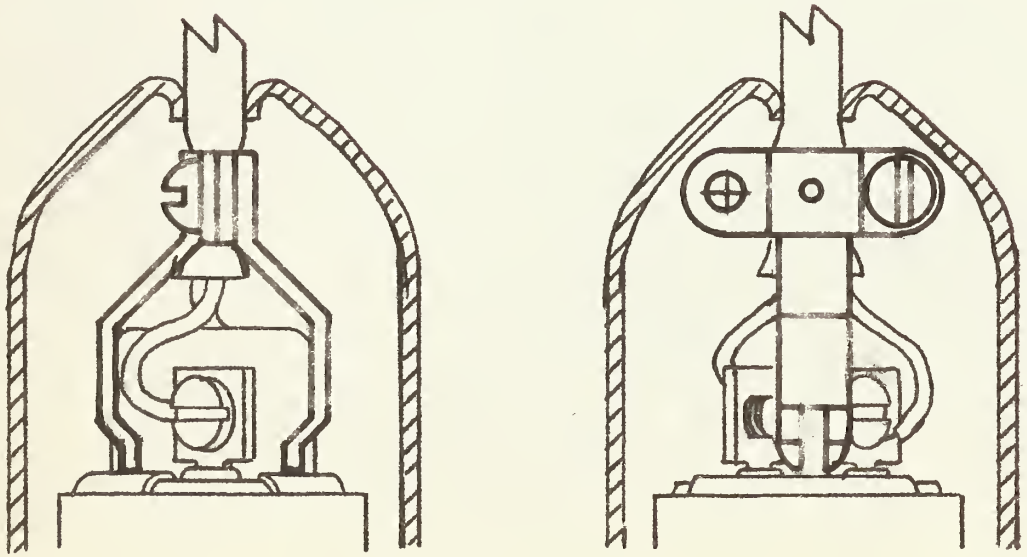



FIGURE 1



CABLE CLAMP
FOR MODIFICATION OF
COCKPIT EXTENSION LAMP ASSEMBLY
TYPE B-7
SPEC. NO. 94-32228-A

MATERIAL : 0.035 STEEL SUITABLY
PROTECTED AGAINST CORROSION

NBS TEST 21N-78/53

FIGURE 2

| NATIONAL BUREAU OF STANDARDS<br>WASHINGTON 25, D. C. | | |
|---|---|---|
| DRAFTSMAN<br>RSR | DATE<br>12/9/53 | SCALE<br>NONE |
| DIV SEC<br>2 1 | CABLE CLAMP | |